03050206-030

(Cow Castle Creek)

General Description

Watershed 03050206-030 is located in Orangeburg County and consists primarily of *Cow Castle Creek* and its tributaries. The watershed occupies 42,569 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Goldsboro-Lynchburg-Rains series. The erodibility of the soil (K) averages 0.17; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 1.77% urban land, 28.02% agricultural land, 14.53% scrub/shrub land, 1.25% barren land, 40.82% forested land, 13.60% forested wetland (swamp), and 0.01% water.

Cow Castle Creek originates near the City of Orangeburg and accepts drainage from Crum Branch, Buck Branch, and Patrick Branch before flowing into Four Hole Swamp. There are a total of 64.5 stream miles in this watershed, all classified FW.

Water Quality

Station #	Type	<u>Class</u>	Description
E-050	W	FW	COW CASTLE CREEK AT S-38-170

Cow Castle Creek (E-050) - This stream was Class B until April, 1992. Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Natural conditions in this stream may have contributed to the observed low dissolved oxygen values. Recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the streams within this watershed (see advisory p.31).

Permitted Activities

Point Source Contributions

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)
COMMENT

COW CASTLE CREEK TOWN OF BOWMAN PIPE #: 001 FLOW: 0.236 WQL FOR NH3-N, BOD5 NPDES# TYPE LIMITATION

> SC0040037 MINOR MUNICIPAL WATER QUALITY

Growth Potential

Interstate 26 crosses this watershed and should promote some growth around the two interchanges near the Town of Bowman. U.S. Highway 178 parallels I-26 and runs through Bowman. At the top of the watershed, a growth corridor runs from the City of Orangeburg to the Town of Rowesville along U.S. Highway 21, as does a rail line.